Chapter 12
Coastal Nonpoint Source Pollution Program

Overview

For many years following the enactment of the Clean Water Act (CWA) in 1972, the focus of attention was mainly on the chemical aspects of water quality and on controlling "point source" pollution that discharged into waters through pipes, primarily from industrial and municipal sewage treatment plants. These efforts were controlled by a system of permits issued by states and the USEPA under the National Pollutant Discharge Elimination System (NPDES) established by section 402 of the CWA.

The NPDES program continues to have considerable success in cleaning up the nation's waters. However, nonpoint source pollution (NPS) remains a major pollution problem. Unlike "point source" pollution from industrial and sewage treatment plants, NPS is created by many diffuse sources. Rainfall and snowmelt that moves across the ground as runoff, picks up and transports pollutants to rivers, lakes, and wetlands, impairing our drinking water supplies, recreation, fisheries, and wildlife. NPS results from a variety of land use practices such as from the following:

- Fertilizers, herbicides and pesticides from agricultural lands and residential areas
- Oil, grease, salt, and toxic chemicals from urban runoff
- Sediment from construction sites, agricultural and forestlands, and eroding drainage ways
- Bacteria and nutrients from livestock, pet waste and faulty septic systems

In order to address NPS, Congress enacted Section 319 of the CWA in 1987, authorizing the USEPA to adopt and implement programs and issue grants to states. Under Section 319, NPS is defined as "Land management activity or land use activity that contributes or may contribute to ground and surface water pollution as a result of runoff, seepage, or percolation and that is not defined as a point source in Section 115.01, subdivision 15." The requirements include the identification of best management practices (BMPs) and measures that will be used to reduce pollutant loads upon the state's surface and groundwater resources along with the identification of programs and goals to guide and achieve their implementation.

NPS is a key factor in the degradation of many coastal waters, including the Great Lakes. It affects their large diversity of plants and animals and major recreational areas and affects water supply for millions of people. Coastal waters are especially affected by NPS due to the large number of people that live near the coast. In 2003, approximately 153 million people (53 percent of the nation's population) lived in the 673 U.S. coastal counties, an increase of 33 million people since 1980 (Source: Population Trends Along the Coastal United States: 1980-2008). The rapidly increasing population growth and development in coastal regions has resulted in increasing land use pressures on our coastal lands and waters.

With the coastal population expected to continue its rapid growth, Congress made a finding that state management programs under the CZMA are among the best tools for protecting coastal resources and must play a larger role in improving coastal water quality. Therefore, Congress enacted a new program under Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), specifically addressing NPS on coastal water quality. It is jointly administered by NOAA and the USEPA, bringing together the state's coastal zone management agency (IDNR) and the state's Section 319 agency (IEPA).

Section 6217 requires each state with an approved coastal zone management program to develop a coastal NPS program and implement coastal NPS "management measures" to restore and protect coastal waters. The central purpose of Section 6217 is to strengthen the links between federal and state coastal zone management and water quality programs and to enhance state and local efforts to manage land use activities that degrade coastal waters and habitats.

Program Objectives and General Requirements

The coastal NPS program will seek to improve coordination and to build partnerships and networks that facilitate the implementation of methods to minimize polluted runoff. Working with state and local authorities, the program encourages pollution prevention efforts at a local level, particularly improvements to land use planning and zoning practices. The program shall serve as an update and expansion of Illinois' Section 319 program as it relates to land and water uses affecting coastal waters.

Within 30 months following approval of the ICMP, Section 6217 requires that Illinois develop a draft Coastal NPS program and submit it to the USEPA and NOAA for approval. As an overview, the general Section 6217 requirements will require that the coastal NPS program contain the following:

- The identification of, and a continuing process for identifying land uses which, individually or cumulatively, may cause or contribute significantly to a degradation of those coastal waters where there is a failure to attain or maintain applicable water quality standards or protect designated uses, which are threatened by reasonably foreseeable increases in pollution loadings. These areas will be considered as critical coastal areas within which any new land uses or substantial expansion of existing land uses shall be subject to management measures.

- The implementation of additional management measures applicable to the identified land uses and critical coastal areas that is necessary to achieve and maintain applicable water quality standards and protect designated uses.

- The provision of assistance to local governments and the public for implementing the management measures and for determining their effectiveness, including assistance in developing ordinances and regulations, technical guidance and training, demonstration projects, and through financial incentives.

- Opportunities for public participation in all aspects of the program, including public hearings, technical and financial assistance, and public education.

- The establishment of mechanisms to improve coordination among state agencies and between state and local officials responsible for land use programs, permitting and enforcement, habitat protection, public health and safety, i.e., through joint project review and memoranda of agreement.

NOAA and the USEPA developed guidance documents and clarification memos to assist states develop and implement Coastal Nonpoint Pollution Control Programs, which can be found at http://coastalmanagement.noaa.gov/nonpoint/guide.html.

NPDES Phase I storm water rule continues to apply to construction activities greater than five acres, as well as to municipal separate storm sewer systems (MS4s) in urbanized areas that serve more than 100,000 people. NPDES Phase II expanded coverage of permitted activities to include construction activities between one and five acres, as well as MS4s in urbanized areas that serve between 50,000 and 100,000 people (and, in some cases, localities with fewer than 50,000 people). The USEPA and NOAA identified ten management measures that overlap in part or in full with the expanded NPDES storm water regulations. Thus, storm water runoff that ultimately is regulated by an NPDES permit is not required to be addressed the coastal NPS program.

NOAA and the USEPA have approved the use of Section 401 Clean Water Act certifications to manage the impacts of NPS. States can implement management measures in sequence and assess effectiveness in achieving water quality goals in determining the need for additional management measures.

The guidance documents identified the major categories of nonpoint sources that impair or threaten coastal waters nationally as follows:

1. Agricultural Runoff

2. Silvicultural (forestry)

3. Runoff Urban Runoff (including developing and developed areas)

4. Marinas and Recreational Boating

5. Hydromodification: Channelization and Channel Modification, Dams, and Streambanks and Shoreline Erosion

6. Wetlands, Riparian areas, and Vegetated Treatment Systems (This category promotes the protection and restoration of wetlands and riparian areas and the use of vegetated treatment systems as management measures to control NPS emanating from a broad variety of sources.)

These documents provide general technical guidance for NPS management such as source control, delivery reduction and a management systems approach. The USEPA has determined that the management measures identified in the guidance are economically achievable, and that Congress defined "management measures" to mean "economically achievable measures ... which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives."

The 1993 guidance also provided both regulatory and non-regulatory approaches, along with other innovative approaches to ensure implementation of management measures. Many of the cited examples are already in-place in our coastal communities. Examples of regulatory approaches include local storm water ordinances for development projects to control storm water peak flows, total runoff volume, or pollutant loading. Developers are often required to implement storm water practices, such as detention ponds or constructed wetlands, to meet performance standards for the development.

Non-regulatory approaches include the flexibility to employ economic incentives, disincentives, or innovative approaches to address these types of sources, if the state can ensure such approaches will result in the necessary implementation of the management measures. States will have to include back-up enforcement authorities for voluntary programs that could include sunset provisions for incentive programs. State tax credits, tax deductions, tax rebates, cost-share programs, performance bonds, or loan programs and other economic incentives may be used to provide financial support.

NOAA and the USEPA expect that states will employ a range of approaches in creating enforceable policies and mechanisms to implement the additional management measures and to identify those portions of the coastal nonpoint programs that are to be implemented by local governments. They also expect states to include a program to provide technical and other assistance to local governments and the public in the state coastal NPS program. NOAA and the USEPA do not expect states to implement management measures for nonpoint sources that do not, individually or cumulatively, have a significant impact on coastal waters. Subsequent to program approval, NOAA and the USEPA will allow states to further exclude sources either by category, subcategory or management measure or on a geographic basis (e.g., a Section 6217 management area, watershed, county) where states can provide information (e.g., monitoring data) to demonstrate that a source is or reasonably not expected to become significant, either

individually or cumulatively. The guidelines acknowledge the benefits of utilizing voluntary mechanisms to achieve water quality goals.

Existing Water Quality Management Plans and Programs in Illinois

The following references were used in describing Illinois' water quality management programs:

1. Illinois Environmental Protection Agency. 1988. *Assessment of Nonpoint Source Impacts on Illinois Water Resources*. Division of Water Pollution Control, IEPA/WPC/88-020.

2. Illinois Department of Agriculture. 1992. *Statewide Survey for Agricultural Chemicals in Rural, Private Water-Supply Wells in Illinois.* #8522.

3. Illinois Environmental Protection Agency. 1992. *Illinois Water Quality Management Plan.* Division of Water Pollution Control, IEPA/WPC/92-220.

4. Illinois Environmental Protection Agency. August 2008. *Illinois Integrated Water Quality Report and Section 303(d) List – 2008.* Bureau of Water, IEPA/BOW/08-016.

5. Illinois Environmental Protection Agency. July 2001. *Illinois Nonpoint Source Management Program.* Bureau of Water, IEPA/BOW/01-009.

6. Chicago Metropolitan Agency for Planning and the Illinois Environmental Protection Agency. May 2007. *Guidance for Developing Watershed Action Plans in Illinois*.

<u>Illinois Nonpoint Source Management Program</u>

State assessments of nonpoint source impacts shows that the majority of Illinois' NPS problems continue to be caused by agriculture, urban runoff, hydrologic modifications, and resource extraction activities.

The Illinois Nonpoint Source Management Program (Program) was developed to provide an overview of program initiatives that will be utilized to address water resource problems as identified in the Assessment and to provide guidance in the management of NPS water resource problems in Illinois. The requirements of Section 319 include the following:

1. Identification of BMPs and measures that will be used to reduce pollutant loads upon the state's surface and groundwater resources;

2. Identification of programs to achieve implementation of BMPs;

3. Identification of goals to guide the implementation of BMPs and NPS control programs;

4. Certification that the laws of the State of Illinois provide adequate authority to implement this NPS management program;

5. Identification of financial assistance programs, which will support the implementation of BMPs and NPS control programs; and

6. Identification of federal assistance programs and development projects the state will review for their effect on water quality.

The primary objective for the Program is to continue the reduction of NPS in Illinois so that the attainment of WQMP policies and recommendations can be realized. Primary goals include:

1. Expand, update and/or create state implementation and research programs within current budgetary constraints, which will better serve to protect the state's water resources from NPS (i.e., to reduce the number of lake acres, stream miles, and groundwater having use impairments caused by NPS);

2. Continue the statewide mechanism and process that enables state agencies and organizations, as a collective group, to equitably prioritize NPS control projects for funding, which may become available from local, state, and/or federal sources;

3. Continue the incorporation of "improved water quality" as a priority objective in all NPS reduction programs; and

4. Increase the public's awareness and involvement in local NPS initiatives to serve as a catalyst for state and federal involvement at the local level.

The sections within the Program were developed to describe Illinois' NPS management activities, as well as to meet the requirements of Section 319. The Program provides a brief discussion of statewide authorities that give the IEPA the responsibility for its development and implementation and also provides a brief summary of results of the state's NPS assessment as reported in the Assessment and the biennial Illinois Water Quality Report. NPS reduction programs are summarized, and goals and objectives regarding significant NPS initiatives are outlined. The "process" or "mechanism" which Illinois uses to prioritize and fund future projects is also described. The Program also identifies those federal programs that the IEPA currently reviews for consistency with statewide goals and objectives.

The goals, objectives, initiatives, and timetables identified in the Program are utilized to guide Illinois' water quality protection efforts. Updates and revisions to the Program will be made in accordance with state and federal program changes and as needed to assure that it comprehensively addresses the initiatives that will be utilized to address water resource problems.

To accomplish the recommendations of the Program, the IEPA prepares Annual Work Plans that identify specific projects and best management practices to reduce nonpoint source pollution along with a schedule for their implementation over a two-year period. In addition to nonpoint source pollution control demonstration projects, BMP construction, and educational programs, the Annual Work Plans also describe the specific activities to be carried out by the IEPA under its base-operating program during the same time period. Progress in satisfying the milestones and objectives stated in the Annual Work Plans is evaluated every six months and reported in the "State of Illinois Section 319 Biannual Report." Specific goals and schedules for the implementation of BMPs are also contained in Watershed Based Plans developed and approved by the IEPA in accordance with the Watershed Management Program. Utilizing the water quality based indicators and the assessment data provided through the 305(b) report, the IEPA can determine if satisfactory progress is being achieved, and make Program adjustments as necessary. Progress on the achievement of Program recommendations related to groundwater protection are described in the "Illinois Groundwater Protection Program - Biennial Comprehensive Status and Self-Assessment Report" prepared by the Interagency Coordinating Committee on Groundwater. This report provides a detailed discussion of the nature, schedule, and status of specific activities being implemented to reduce groundwater contamination from nonpoint source pollution.

In establishing the Program and preparing Annual Work Plans, the IEPA considers the input from state, federal, and local agencies, as well as from the public. The IEPA invites participation in the hearing process from all interested and affected parties, including state, federal, and local agencies, the business community, not-for-profit and environmental organizations, and individuals. The input is carefully considered in finalizing Program revisions and utilized to strengthen its effectiveness and viability. The IEPA has also held regional workshops to obtain assistance from the public and other governmental agencies in establishing the Watershed Management Program, encouraging local entities to develop watershed implementation plans that will identify specific measures to achieve Program objectives.

Certification of IEPA Authorities Section 319 of the CWA requires that Illinois identify those laws or authorities, which certify the IEPA as the state water pollution control agency responsible for developing and implementing the Nonpoint Source Management Program. The following describes those authorities:

Section 4(1) of the Illinois Environmental Protection Act ("Act") designates IEPA as the "water pollution control agency" for the state for all purposes of the CWA. One of the purposes of the CWA, as stated in Section 101(a)(7), is the expeditious development and implementation of programs for the control of nonpoint sources of pollution. This purpose is expressed in the Section 319, which requires, among other things, the development of state management programs for controlling pollution to navigable waters from nonpoint sources. Therefore, the Act designates IEPA as the "water pollution control agency" for Illinois for the development and implementation of state management programs to control pollution from nonpoint sources. The IEPA is also authorized under Section 4(1) to take necessary action to secure for Illinois the benefits of the CWA and other federal acts (e.g., NPS Program and Section 6217).

Also, Section 319(a)(2) permits a state to rely upon information developed pursuant to Section 303(e), among others, to develop the Assessment required to be submitted in conjunction with the State NPS Program - Section 303(e), the IEPA is required to have a continuing planning process approved by USEPA resulting in water quality management plans for all navigable waters in the state. States were also allowed to use in state assessment reports, appropriate elements of waste treatment management plans developed pursuant to CWA Sections 208(b) and 303(e). The fact that IEPA is authorized pursuant to Section 4(m) of the Act to engage in planning processes and activities pursuant to Section 303(e) and to use that information for state assessment reports is a further indication of IEPA's authority to develop state management programs to control nonpoint sources of pollution to navigable waters in the state.

Illinois' NPS Assessment report entitled "Assessment of Nonpoint Source Impacts on Illinois Water Resources" (Reference #1 above) was developed pursuant to Section 319 primarily for the purpose of identifying waters in the state that need additional NPS corrective actions to attain or maintain the "applicable water quality standards or the goals and requirements" of the CWA, and to identify the nonpoint sources which add significant pollution to navigable waters in Illinois. Assessment updates are achieved through the biennial 305(b) report. Data from the 305(b) report and other appropriate sources are used to assess the IEPA’s success in achieving the Program’s goals and objectives based on the criteria described in the Measures and Indicators of Program Success section of the report.

The following is a summary of assessment results found at Lake Michigan (Reference 5, p. 6):

Lake Michigan includes 63 shoreline miles forming the northeastern portion of Illinois' border. All 63 miles were rated full support/threatened for overall use due to sport fish consumption advisories. Aquatic life use was also rated full/threatened. For swimming use, 50 miles of Illinois' beaches were rated full use and 13 miles partial support/minor impairment. All 63 miles of the Illinois shoreline fully supported drinking water uses but were rated as non-support for fish consumption.

Of the five Illinois harbors evaluated, four (Waukegan, Great Lakes Naval Training Center (GLNTC), Chicago, and Calumet) were rated as non-support for fish consumption due to the fish advisories and one (Wilmette) as partial support/moderate impairment for both overall and aquatic life use. Support of the swimmable use in harbors could not be determined because of a lack of data. Swimming in most harbors is not allowed by local authorities for reasons other than water quality.

Priority organics, PCBs and chlordane pose a potential major impact along the entire 63 miles of Illinois Lake Michigan shoreline. Priority organic compounds tend to bioaccumulate in fish flesh even though rarely detected in water column samples and are a problem in sediment in localized harbor areas. Lead, zinc, and copper are a major problem in harbor sediments. Harbors with heavily polluted sediments include Waukegan Harbor (PCBs, lead, and zinc), GLNTC Harbor (copper, lead, and zinc), Chicago Harbor (lead), and Calumet Harbor (lead and zinc). Urban runoff and combined sewer overflows are a moderate/minor source of pollutants.

Best Management Practices (BMPs) IEPA's Assessment describes a process through which Illinois agencies and organizations work cooperatively with local watershed steering committees through resource planning to select effective BMPs for implementation in watershed protection project areas. BMPs, which could be utilized to reduce NPS during implementation of these watershed projects, are identified in Table 1 in the IEPA July 2001 report. There are 157 BMPs listed in that table. All BMPs implemented through the Illinois NPS Management Program shall be designed and constructed in accordance with the standards and specifications as identified in the report.

Illinois NPS Program Initiatives Illinois has an aggressive NPS control program that encompasses many local, state, and federal organizations. Illinois organizations conduct many programs to address the major NPS categories, including agriculture, construction, urban runoff, resource extraction, hydrologic modification and silviculture. Citizen groups, not-for-profit organizations, and educational institutions have developed a variety of NPS project initiatives. Many begin locally, promoting a grassroots' support system including local chapters and soil and water conservation districts (SWCD) for implementation.

These initiatives frequently cover areas not normally included in state and federal NPS programs. The coordination and monitoring of such activities by agencies such as the IEPA and the IDOA can enhance the accomplishments of the individual groups. The IEPA, providing assistance to standardize water quality data collection, can reduce duplication of efforts and provide a comprehensive statewide database system available to organizations involved to continue their work in water quality improvement.

The Illinois Water Quality Management Plan (WQMP) serves as a catalyst for the development of many NPS programs. For example, the WQMP had a set of interim soil erosion reduction deadlines aimed at reducing soil losses in the State to tolerable levels, establishing Illinois' "T by 2000" program in 1983.

IEPA Land Use Categorical Assessment

The CZARA amendments contain guidance that specifies management measures to address the source categories of NPS: agriculture, silviculture, urban, marinas, and hydromodification. The ICMP inland coastal zone includes the entire Lake Michigan and the inland waterway corridors. The ICMP will only include the Lake Michigan watershed portion (approximately 85 square miles) in the Coastal NPS Control Program. The watershed is nearly exclusively in urban land use. The following is a summary of IEPA's assessment of the land uses and programs by categories for Illinois' Coastal NPS Control Program:

Agriculture Source Category

The exclusion of agriculture is proposed since agricultural use in Illinois' Coastal Area represents an insignificant portion of the total land usage and nonpoint source inventories and data (305(b) and 303(d)) do not suggest significant contributions of degradation by agricultural activities.

Forestry Source Category

The exclusion of forestry is proposed since commercial forestland use in Illinois' Coastal Area represents an insignificant portion of the total land usage and nonpoint source inventories and data (305(b) and 303(d)) do not suggest significant contributions of degradation by forestry management or harvesting.

Urban Areas Source Category

"*NPDES Storm Water Program*" - The CWA Amendments of 1987 established the NPDES storm water program. The act called for implementation in two phases. Phase I addressed the most significant sources of pollution in storm water runoff. Phase II addresses other sources to protect water quality. The Municipalities located in urban areas as defined by the Census Bureau are required to obtain NPDES permit coverage for discharges from their municipal separate storm sewer systems (MS4s). Municipalities located outside of urbanized areas may need to comply within 180 days notice or as determined by the NPDES Permitting Authority. As of March 10, 2003, construction sites that disturb one acre or more are required to have coverage under the NPDES general permit for storm water discharges from construction site activities. Municipalities under 100,000 populations are no longer exempt from the construction site and the industrial storm water requirements. Wastewater treatment plants of 1.0 mgd or more will need a General Storm Water Permit for Industrial Activities. The "no-exposure" exemption definition has been expanded to all industrial categories except construction.

"*303(d)/TMDL Program*" - Section 303(d) of the CWA requires states to identify waters that do not meet applicable water quality standards or do not fully support their designated uses. States are required to submit a prioritized list of impaired waters, known as the 303(d) List, to the USEPA for review and approval. The CWA also requires that a Total Maximum Daily Load (TMDL) be developed for each pollutant of an impaired water body. The establishment of a TMDL sets the pollutant reduction goal necessary to improve impaired waters. It determines the load, or quantity, of any given pollutant that can be allowed in a particular water body. A TMDL must consider all potential sources of pollutants, whether point or nonpoint, taking into account scientific uncertainty and the effects of seasonal variation. Developing TMDLs in a watershed begins with the collection of vast amounts of data on factors including water quality, point source discharge, precipitation, soils, geology, topography, and land use. All impaired water-body segments within the watershed are identified, along with the potential pollutants causing the impairments. Next, the IEPA determines the tools (e.g. computer models) necessary to calculate pollutant loads and develop the TMDL. The model can then be used to develop different scenarios, by first determining the amount of specific pollutants each source contributes, then calculating the amount each pollutant needs to be reduced, and finally specifying how the reduced pollutant load would be allocated among the different sources. After the reduced pollutant loads have been determined, an implementation plan is developed, spelling out the actions necessary to achieve the goals, specifying limits for point source discharges and recommending BMPs for nonpoint sources. It also estimates associated costs and lays out a schedule for implementation. Commitment to the implementation plan by the citizens who live and work in the watershed is essential to success in reducing the pollutant loads.

Marinas and Recreational Boating Source Category

"*Dredge and Fill Permit Program*" - Construction projects in Illinois waterways, floodplains, and wetlands often require authorizations from both the USACE and the IEPA. Applicants seeking a permit to allow discharges of dredged or fill material into waters of the United States, including streams, lakes, and wetlands must apply to the USACE for a permit under Section 404 of the CWA. Activities that require a

Section 404 permit include navigational dredging, levee construction, channel clearing, filling of wetlands for land development, and waterway impoundment for construction of a water reservoir. The IEPA issues water quality certification pursuant to Section 401 of the CWA. This certification must be issued prior to the commencement of construction activity for all projects requiring a Section 404 permit.

"*Water Quality Standards*" - All waters in Illinois, including Lake Michigan and its tributaries, must meet State Water Quality Standards. This means that all waters in the Great Lakes basin must be free from substances, materials, debris, oil or scum attributable to municipal, industrial, agricultural, and other land use practices. Also, other discharges must not form objectionable deposits; not be in amounts to be unsightly; not produce color, visible oil sheen, odor, or other objectionable conditions; or not be in concentrations that will contribute to the growth of algae or aquatic plants to a degree of being a nuisance; and should not be in amounts that are toxic to aquatic life, other animals or humans.

Hydromodification Category (Channelization and Channel Modification, Dams, and Streambanks and Shoreline Erosion)

"*Dredge and Fill Permit Program*" (See above)

"*Nonpoint Source Pollution Control Program*" - Under Section 319(h), the IEPA receives federal funds for NPS control projects in cooperation with local units of government and other organizations. The program emphasizes funding for implementing corrective and preventative BMPs on a watershed scale; demonstration of new and innovative BMPs on a non-watershed scale; and the development of information/education NPS control programs. State and local governmental units, citizen and environment groups, individuals, and businesses are eligible to receive Section 319(h) funds to carry out approved NPS management projects that implement appropriate NPS control BMPs or enhance the public's awareness of NPS. Examples of funded activities include streambank and shoreline stabilization, wetland restoration, storm water detention basins, bio-swales, terraces, waterways, sediment basins, nutrient management, and education programs. Activities required by law or permit are ineligible.

The "*Illinois Clean Lakes Program*" (ICLP) is a financial assistance grant program that supports lake owners' interest and commitment to long-term, comprehensive inland lake management and ultimately results in improved water quality and enhanced inland lake use. Detailed "Phase I" diagnostic/feasibility studies scientifically document the causes, sources, and magnitude of lake impairment. Data generated from these monitoring studies are used to recommend lake protection or restoration practices for future implementation. "Phase II" implementation project grants can then be awarded to lake owners to implement Phase I report recommendations. Through the ICLP, the IEPA provides technical and financial assistance primarily to governmental entities that manage publicly owned lakes with extensive public access and use. Primary objectives of the program are control of pollution sources that affect water quality, restoring lakes that have deteriorated in recreational and ecological quality, and protecting high quality lake resources. State funding for the program is made available under Conservation 2000.

The "*Priority Lake and Watershed Implementation Program*" is a program to support inland lake protection/restoration activities at "priority" lakes where causes and sources of problems are apparent, project sites are highly accessible, project size is relatively small, and local entities are in a position to implement needed treatments. Priority lakes are identified by the IEPA in a report entitled "Targeted Watershed Approach - A Data Driven Prioritization" (IEPA/BOW/97-004). Priority lakes are generally high quality recreational or unique aquatic resources, and/or lakes serving multiple uses (recreation and public water supply) in need of protection or restoration. The IEPA works cooperatively with managers of publicly owned inland lakes to implement lake protection and restoration activities. Fundable projects include shoreline erosion control (rip rap and/or bioengineering methods); aerator/destratifier installation;

near lake dry dams, filter strips; spillway/dam repair; best management practices in immediate watershed of the lake; macrophyte harvest to address public access/use; or dredging to address public access/use.

The "*Lake Education Assistance Program*" provides for reimbursement of costs incurred up to $500 for school and other not-for-profit organization participation in lake/lake watershed related educational field trips and activities or attendance at related workshops. Funding is provided through Conservation 2000.

Wetlands, Riparian areas, and Vegetated Treatment Systems Category

This category includes management measures often used in implementation plans to address the major categories of nonpoint sources that impair or threaten coastal waters nationally. Thus, the programs listed below and previously stated for other categories can include these management measures:

"*Dredge and Fill Permit Program*" (described above)
"*Nonpoint Source Pollution Control Program*" (described above)
"*Illinois Clean Lakes Program*" (described above)
"*Priority Lake and Watershed Implementation Program*" (described above)
"*Lake Education Assistance Program*" (described above)

IDNR and IEPA Plan for Coastal NPS Program Development

It is the goal of the IEPA to initiate and implement a comprehensive NPS control program for the enhancement of Illinois' water resources. It is IEPA's objective to recognize and utilize CZARA and the management measures identified in CZARA addressing the causes of NPS affecting all water resources in Illinois. By recognizing and utilizing CZARA as an additional source to this Program, the IEPA establishes a comprehensive and holistic approach for the abatement of NPS. (p. 17, IEPA July 2001)

The IEPA has been the key supporting state agency to the IDNR in the development of the ICMP and has provided much of the information in developing this chapter. The IEPA will continue to provide full support to the IDNR in developing a Coastal NPS Control Program Development Plan for Illinois.

Illinois will dedicate a portion of their ICMP funding, funding from the IEPA 319 program, and other funding as needed to develop and administer the Coastal NPS Program. One person from the IDNR-ICMP section will be assigned to work with one person from the IEPA Bureau of Water. This is necessary due to the overlapping ICMP and IEPA 319 functions. This is also the method of many other states, which effectively meets the ICMP requirements and further strengthens their 319 programs.

The first task will be to determine if the Lake Michigan watershed boundary as proposed for the Coastal NPS Program, will meet the approval of the USEPA and NOAA. Upon approval of the Coastal NPS Program Boundary, the next step will be to develop a land use map of the boundary. While preliminary, the land use map should be in a GIS format and be scaled and delineated in order to provide a detailed assessment of the land use categories. The IDNR and the IEPA will work closely with the USEPA and NOAA to ensure the proper construction of the map that will enable decisions for addressing management areas and category/subcategory areas that can be excluded. This map should also delineate those areas covered by NPDES permits that will be excluded from the Coastal NPS Program.

The development of the Coastal NPS Program will require the cooperation and assistance of the coastal communities in defining their local ordinances, programs and BMPs, which they utilize in addressing NPS within the Lake Michigan watershed.